

AMENDMENTS TO THE CLAIMS

Claims 1-17 (cancelled).

18. (original) A system for achieving regional systemic therapy in an individual comprising an agent administered to the individual which results in a decrease in blood perfusion in the individual, and

an ultrasound applicator adapted to be coupled to an electrical signal generating machine to apply ultrasound energy to affect an increase in blood perfusion in a localized body region before, during or after administration of the agent to the individual.

19. (original) A system according to claim 18 wherein the ultrasound applicator is sized to be placed in acoustic contact with an individual to transcutaneously apply ultrasound energy to the heart.

20. (original) A system according to claim 18 wherein the ultrasound applicator generates ultrasound energy at a prescribed fundamental therapeutic frequency laying within a range of fundamental therapeutic frequencies not exceeding about 500 kHz.

21. (original) A system according to claim 20 wherein the ultrasound applicator comprises a transducer and an ultrasonic coupling region adapted, in use, to contact skin and having an effective diameter (D) to transcutaneously conduct ultrasound energy at the prescribed fundamental therapeutic frequency by the transducer, wherein the transducer has an aperture size (AP) not greater than about 5 wavelengths, wherein AP is expressed as $AP = D/WL$, where WL is the wavelength of the fundamental frequency.

22. (original) A system according to claim 20 wherein the range of fundamental therapeutic frequencies is between about 20 kHz and about 100kHz.

23. (original) A system according to claim 22 wherein the prescribed fundamental therapeutic frequency is about 27 kHz.

24. (original) A system according to claim 18 wherein the ultrasound applicator is sized to provide an intensity not exceeding 3 watts/cm² at a maximum total power output of no greater than 150 watts operating within a range of prescribed fundamental therapeutic frequencies not greater than 500 kHz.

25. (original) A system according to claim 24 wherein the range of fundamental therapeutic frequencies is between about 20 kHz and about 100kHz.

26. (original) A system according to claim 25 wherein the prescribed fundamental therapeutic frequency is about 27 kHz.

27. (original) A system according to claim 18 further including an assembly to stabilize placement of the ultrasound applicator during conduction of ultrasound energy.

28. (original) A method for achieving regional systemic therapy in an individual comprising the steps of

administering an agent which results in a decrease in blood perfusion in the individual, and
applying ultrasound energy to affect an increase in blood perfusion in a localized body region before, during or after administration of the agent to the individual.

29. (original) A method according to claim 28 wherein the ultrasound energy is applied to the heart.

30. (original) A method according to claim 29 wherein the ultrasound energy is transcutaneously applied to the heart.

31. (original) A system for achieving regional systemic therapy in an individual comprising an agent administered to the individual, and
an ultrasound applicator adapted to be coupled to an electrical signal generating machine to apply ultrasound energy to affect an increase in blood perfusion or uptake of the agent in a localized body region before, during, or after administration of the agent to the individual.

32. (cancelled)

33. (original) A system according to claim 31 wherein the ultrasound applicator generates ultrasound energy at a prescribed fundamental therapeutic frequency laying within a range of fundamental therapeutic frequencies not exceeding about 500 kHz.

34. (original) A system according to claim 33 wherein the ultrasound applicator comprises a transducer and an ultrasonic coupling region adapted, in use, to contact skin and having an effective diameter (D) to transcutaneously conduct ultrasound energy at the prescribed fundamental therapeutic frequency by the transducer, wherein the transducer has an aperture size (AP) not

greater than about 5 wavelengths, wherein AP is expressed as $AP = D/WL$, where WL is the wavelength of the fundamental frequency.

35. (original) A system according to claim 33 wherein the range of fundamental therapeutic frequencies is between about 20 kHz and about 100kHz.

36. (original) A system according to claim 35 wherein the prescribed fundamental therapeutic frequency is about 27 kHz.

37. (original) A system according to claim 33 wherein the ultrasound applicator is sized to provide an intensity not exceeding 3 watts/cm² at a maximum total power output of no greater than 150 watts operating within a range of prescribed fundamental therapeutic frequencies not greater than 500 kHz.

38. (original) A system according to claim 37 wherein the range of fundamental therapeutic frequencies is between about 20 kHz and about 100kHz.

39. (original) A system according to claim 38 wherein the prescribed fundamental therapeutic frequency is about 27 kHz.

40. (original) A system according to claim 28 further including an assembly to stabilize placement of the ultrasound applicator during conduction of ultrasound energy.

41. (original) A method for achieving regional systemic therapy in an individual comprising the steps of

administering an agent to the individual, and

applying ultrasound energy to affect an increase in blood perfusion or uptake of the agent in a localized body region before, during or after administration of the agent to the individual.

42. (cancelled)